NWS CHANGE FORM PART A	1. DATE SUBMITTED ~~10 April 2000~~ 12 April 2000

This form is in three parts. Submitters must complete unshaded blocks in Part A and as much of Part B as possible. WSH will complete Part C (implementation details). If there is no specific required change date, enter 60 days from date submitted. Address questions to NWS Change Management at (301) 713-1373. Submit change requests to the NWSRC mailbox (External: NWSRC@noaa.gov).

2. ORIGINATOR OFFICE APO	3. SUBMITTING AUTHORITY Name: Ward Seguin Routing Code: W/APO1	4. COGNIZANT TECHNICAL INDIVIDUAL Name:Gary Battel Routing Code:W/OSD25 Phone:(301) 713-1768x194	5. ORIGINATOR TRACKING NUMBER P426_TDL_A100060

6. SYSTEMS AFFECTED BY CHANGE

☐ DATA PRODUCTS (Complete Data Products Supplement)

☐ ASOS   [x] AWIPS   ☐ CRS   ☐ NEXRAD   ☐ OTHER (specify) _____

7. WSH TRACKING NUMBER

NWS 580
14 April 2000

8. TITLE OF CHANGE
Provide Updated Climate Application (version 4.3.1) to all sites

9. TYPE OF CHANGE ☐ HARDWARE [x] SOFTWARE ☐ DOCUMENTATION ONLY	10. SITES AFFECTED (Attach Part B, Page 2, if needed) All sites

11. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM (Include problem report reference numbers.)

The National Weather Service plans to implement a national application to create daily climate reports by July 1, 2000. (See Attachment A1)

12. KNOWN OR PROPOSED SOLUTION (Include source and description of new features or data products.)

Implement Version 4.3.1 of the climate program.. (Executables and files listed in Attachment A1)

13. ALTERNATE SOLUTIONS

None

14. REQUIRED CHANGE DATE 4/13/00	15. RATIONALE FOR REQUIRED CHANGE DATE (Include proposed priority, if known.) July 1, 2000 date set by General Kelly for the implementation of the AWIPS Climate program nation wide

CCB/PMC/CMB DECISION

16. DECISION AUTHORITY LEVEL	☐ CCB LEVEL ONLY	☐ PMC or NWS CMB DECISION REQUIRED
17. CCB LEVEL DECISION	☐ APPROVED ☐ RECOMMEND APPROVAL ☐ DISAPPROVED	SIGNATURE DATE SIGNED

FOR USE ONLY WHEN PMC or NWS CMB DECISION REQUIRED

18. PMC OR NWS CMB DECISION	☐ APPROVED ☐ DISAPPROVED	SIGNATURE DATE SIGNED

<table>
<tr><td colspan="2" align="center"><h1>NWS CHANGE FORM
PART B</h1></td><td colspan="2">1. ORIGINATOR TRACKING NUMBER

10 April 2000</td></tr>
<tr><td colspan="2">All RC/ECP submissions must also address the following information. Indicate if any areas are unknown or do not apply. State why information is unknown and when it will be available. Attach extra pages if necessary, referencing each applicable subject.</td><td colspan="2">2. WSH TRACKING NUMBER</td></tr>
<tr><td colspan="4" align="center">FUNDING INFORMATION</td></tr>
<tr><td colspan="2">Estimate costs and indicate known sources of funding. (Include travel time, installation time, administrative time, and software development time when applicable.)</td><td>3. SOURCE OF FUNDING</td><td>4. TOTAL COST

$</td></tr>
<tr><td colspan="2">5. DEVELOPMENT COSTS (Estimate development costs)

This cost is associated with 5.0 development</td><td>KMOD _____
BASE</td><td>AMOUNT</td></tr>
<tr><td colspan="2">6. OPERATIONAL TEST AND EVALUATION COSTS (Estimate test and evaluation costs)
N/A</td><td>BASE</td><td>AMOUNT
$0</td></tr>
<tr><td colspan="2">7. PRODUCTION COSTS (Include acquisition, kit proofing, spares, delivery, and documentation costs)</td><td>KMOD _____
BASE</td><td>AMOUNT
$0</td></tr>
<tr><td colspan="2">8. COMMUNICATIONS SERVICE/CIRCUITS COSTS (Include installation and recurring costs)
N/A</td><td></td><td>AMOUNT
$0</td></tr>
<tr><td colspan="2">9. IMPLEMENTATION SUPPORT COSTS (Include travel, installation, and administrative costs)
None. TDL SST will implement the change (send instructions, place file(s) on NOAA1 server).</td><td>KMOD _____
BASE</td><td>AMOUNT
$</td></tr>
<tr><td colspan="2">9A. LIFE CYCLE SUPPORT COSTS (Less communications service/circuits)
Contractor (PRC) - NCF Operations</td><td>KMOD _____</td><td>AMOUNT
~~Unknown~~</td></tr>
<tr><td colspan="4" align="center">SUPPORTING INFORMATION AND SCHEDULES
Provide detailed information needed to implement the requested change.</td></tr>
<tr><td colspan="2">10. DEVELOPMENT STATUS/SCHEDULE (Major milestones such as Start, Beta Test, and OT&E)
N/A</td><td colspan="2">11. PRODUCTION STATUS/SCHEDULE (Major milestones such as Solicitation, Contract Start Date, Delivery Date, Kit Proofing, etc.)
N/A</td></tr>
<tr><td colspan="2">12. IMPLEMENTATION/RETROFIT SCHEDULE
Sites will pick up the software from the NOAA1 server by May 1, 2000</td><td colspan="2">13. FACILITY INFORMATION (Attach facility drawings/plans.)

N/A</td></tr>
<tr><td colspan="2">14. COMMUNICATIONS INSTALLED (Type required, who will order, and associated hardware required; attach Part B, Page 2, if needed.)
N/A</td><td colspan="2">15. COMMUNICATIONS SERVICE/CIRCUITS TO BE REMOVED
N/A</td></tr>
<tr><td colspan="2">16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES (Include person or organization responsible for obtaining each)
N/A</td><td colspan="2">17. COORDINATION OF CHANGE WITH OTHER CHANGES
Requires AWIPS SW Ver 4.2.6 to be installed prior to implementation. Other AWIPS releases 4.3.1, 4.3.2, and 4.3.3 can be installed without any modification to the installation instructions.</td></tr>
<tr><td colspan="2">18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED (Include part, serial, and document numbers.   Attach Part B, Page 2, if needed.)
N/A</td><td colspan="2">19. STAFF RESOURCE IMPACTS (Skills and workload impact on maintainers, operators, and managers.)
No recurring workload impacts.</td></tr>
<tr><td colspan="2">20. LOGISTICS IMPACTS (Include facilities, maintenance, training, and support equipment impacts.)
N/A</td><td colspan="2">21. OPERATIONAL IMPACTS (Include continuity and back up needs and plans.)
N/A</td></tr>
<tr><td colspan="4">22. ADDITIONAL MAJOR CHANGE ACTIVITIES (Include who will accomplish each of them and staff hours required.)
TDL SST members will place the software changes to the NOAA1 Server. Sites will retrieve the software and instructions and documentation.
Sites will report installation of patch via EMRS (see Part C of this form).</td></tr>
</table>

NWS CHANGE FORM PART B - PHYSICAL ITEM AND DOCUMENT IMPACT MATRIX SUPPLEMENT							1. ORIGINATOR TRACKING NUMBER 10 April 2000			
This information is required prior to publication of Engineering Modification Notes and Software Release Notes. List physical items to be replaced and specify any changes in related documentation. (Submitters should complete this information, if known. WSH will assist.)							2. WSH TRACKING NUMBER			
3. ITEM NAME, CIRCUIT TYPE, SOFTWARE VERSION, OR SITE LOCATION	4. REMOVE REPLACE MODIFY	5. SUPERSEDED ITEM OR CONFIGURATION		6. SUPERSEDING PART NUMBER OR NEW CONFIGURATION	7. DOC TYPE	8. SUPERSEDED DOCUMENT		9. SUPERSEDING DOCUMENT	
		A. PART	B. SERIAL NUMBER(S) OR			A.	B.	A.	B. REV
					TBD				

NWS CHANGE FORM
PART C

WSH is responsible for Part C, but submitters may complete sections that would help clarify the change requirement or the necessary implementation actions.

1. ORIGINATOR TRACKING NUMBER

2. WSH TRACKING NUMBER

NWS 580

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3. CCB COST EVALUATION

NWS COST   FAA COST $ DOD COST $ OTHER AGENCY COST $ TOTAL COST $
(SPECIFY)_____

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4. IMPLEMENTATION DOCUMENTS REQUIRED

[X] Engineering Modification Note   [ ] Software Release Notes   [ ] Other Document (Specify)_____

ADDITIONAL IMPLEMENTATION INSTRUCTIONS (e.g., Implementation schedule, parts shipping instructions, equipment disposal procedures, additional documentation required, and status reporting instructions.) Include documentation, data input, notification vehicle, or specific action step required to verify completion of the implementation activity.

5. IMPLEMENTATION ACTIVITY REQUIRED	6. REQUIRED COMPLETION DATE	7. RESPONSIBLE PERSON AND OFFICE	8. DOCUMENT OR ACTION REQUIRED TO VERIFY COMPLETION
A. Put patch and documentation on Noaa1 server	13 Apr 00	Battel/SST,	N/A
B. Site retrieve patch and load on their system	1 May 00	Sites	N/A
C. Ensure this change is reported to the Weather Service Headquarters (WSH) through the Engineering Management Reporting System (EMRS) according to the instructions in Engineering Hanbook number 4, part 2. Record this RC number (NWS580) in Block 17a of the EMRS report.	1 June 00	See Note 1.	N/A
D. Ensure the appropriate WSH management information systems and configuration management data bases are updated to reflect these changes.	30 June 99	DeTomasso W/OSO113	
Note 1. ESA or other WFO Staff member at each site listed in Part A, Item 10 (Sites Affected) shall report any time (administrative/over-sight/validation/check-out, etc.) spent in support of this change in EMRS.			

Attachment A1:

The first version of the daily climate program appeared in AWIPS 4.2. This software was alpha tested at PBZ the Fall '98 and delivered in AWIPS 4.2 over the Summer '99. Those WFOs which are now using the AWIPS Climate program are already compliant with the NWS requirements for this product.

Climate software, prepared for 4.3 addresses problems found in 4.2, can generate intermediate climate reports, can provide an F6 summary product, and uses the ASOS DSM product when available (see attached). AWIPS 4.3 was made available to WFOs for download from the NOAA1 sever in December 1999 (RC_APO_17). This was approved by the AWIPS CCB at the request of the Western Region in order to replace non-Y2K PC programs there.

Some WFOs have been reluctant to use the AWIPS Climate software until these fixes Release 4.3.1 are made. This change makes the fixes available to all sites by May 1, 2000. It must be in place by May 1, 2000 to allow the sites enough time to configure the software and become familiar with it's use prior to the July 1, 2000 date set by General Kelly for the implementation of the AWIPS Climate program nationwide. The patch is necessary because Release 4.3.1 can not be installed at sites which are in the 60-day freeze period prior to commissioning.

This change will be followed by another change to Alpha test the revised F6 format. This software will be Alpha tested at NYC WFO prior to placing that software on the NOAA1 Sever for distribution in the June 2000 time frame..

Currently, there are 6 files in the climate directory on the NOAA1 server:

1) smm.wpd -- System Manager's Manual for 4.3
2) um.wpd -- User's Manual for 4.3
3) scripts_cli.tar.Z - Tarred and zipped file containing the scripts, commands,
   and data to create new database tables and populate them.
4) install_climate_43.doc - Instructions on how to install these components.
5) install_climate_43.sh - The script to install the climate software components.
6) climate_43.tar.Z - Tarred and zipped file containing the climate software
   components for version 4.3.

For 4.3.1, we don't need to change smm.wpd, um.wpd, or scripts_cli.tar.Z.

We need a new install_climate_431.doc (minor change), a new install_climate_431.sh
(minor change), and a new climate_431.tar.Z, which contains all the new software
components. This information will be prepared by Gary Battel (SST) and completed by 4/13.

Below are the files in scripts_cli.tar.Z;

```
rwxrwxrwx 1100/200     0 Dec 10 19:36 1999 install/
rwxr-xr-x 167/30   3679 Dec 10 19:34 1999 install/cli43_instl.sh
rwxr-xr-x 167/30   1030 Dec 10 19:34 1999 install/updatehmdb43cli.sh
rwxr-xr-x 167/30   2100 Dec 10 19:34 1999 install/updatehmdb99d.sh
rwxr-xr-x 167/30   1763 Dec 10 19:34 1999 install/updatehmdb99e.sh
rwxr-xr-x 167/30   4688 Dec 10 19:35 1999 install/updatehmdb99e.sql
```

Below are the files in climate_43.tar.Z

```
rwxrwxrwx 1100/200     0 Dec 10 19:32 1999 data/
```

```
rwxrwxrwx 1100/200  43353 Dec 10 19:32 1999 data/annual_periods.gif
rwxrwxrwx 1100/200   1155 Dec 10 19:32 1999 data/arrow.gif
rwxrwxrwx 1100/200  31154 Dec 10 19:32 1999 data/awip_ban.gif
rwxrwxrwx 1100/200  69997 Dec 10 19:32 1999 data/climate_master.gif
rwxrwxrwx 1100/200   3378 Dec 10 19:32 1999 data/climo_help.html
rwxrwxrwx 1100/200  84945 Dec 10 19:32 1999 data/climo_prefs.gif
rwxrwxrwx 1100/200   1810 Dec 10 19:32 1999 data/climo_prefs.html
rwxrwxrwx 1100/200   8338 Dec 10 19:32 1999 data/column.gif
rwxrwxrwx 1100/200   5635 Dec 10 19:32 1999 data/configs.html
rwxrwxrwx 1100/200   2014 Dec 10 19:32 1999 data/control_im
rwxrwxrwx 1100/200   2014 Dec 10 19:32 1999 data/control_im_NWR
rwxrwxrwx 1100/200   2015 Dec 10 19:32 1999 data/control_im_NWWS
rwxrwxrwx 1100/200 166788 Dec 10 19:32 1999 data/display.gif
rwxrwxrwx 1100/200  66549 Dec 10 19:32 1999 data/dispmethods.gif
rwxrwxrwx 1100/200    204 Dec 10 19:32 1999 data/dotblue.gif
rwxrwxrwx 1100/200  12728 Dec 10 19:32 1999 data/edit_climate.gif
rwxrwxrwx 1100/200 156494 Dec 10 19:32 1999 data/edit_data.gif
rwxrwxrwx 1100/200   3309 Dec 10 19:32 1999 data/edit_data.html
rwxrwxrwx 1100/200   2968 Dec 10 19:32 1999 data/execute_AM_PM_climate.html
rwxrwxrwx 1100/200    836 Dec 10 19:32 1999 data/f6.html
rwxrwxrwx 1100/200  23223 Dec 10 19:32 1999 data/f6date.gif
rwxrwxrwx 1100/200    186 Dec 10 19:32 1999 data/global_day
rwxrwxrwx 1100/200    671 Dec 10 19:32 1999 data/header_default
rwxrwxrwx 1100/200 138302 Dec 10 19:32 1999 data/import_climate.gif
rwxrwxrwx 1100/200   6933 Dec 10 19:32 1999 data/import_climate.html
rwxrwxrwx 1100/200 191411 Dec 10 19:32 1999 data/imported_data.gif
rwxrwxrwx 1100/200   4687 Dec 10 19:32 1999 data/initialize_climate.html
rwxrwxrwx 1100/200   1070 Dec 10 19:32 1999 data/missing.html
rwxrwxrwx 1100/200  65718 Dec 10 19:32 1999 data/norms_extremes1.gif
rwxrwxrwx 1100/200 152694 Dec 10 19:32 1999 data/norms_extremes2.gif
rwxrwxrwx 1100/200  66605 Dec 10 19:32 1999 data/qcmethods.gif
rwxrwxrwx 1100/200 208824 Dec 10 19:32 1999 data/report_format.gif
rwxrwxrwx 1100/200   7171 Dec 10 19:32 1999 data/report_format.html
rwxrwxrwx 1100/200  60070 Dec 10 19:32 1999 data/report_periods.gif
rwxrwxrwx 1100/200   2681 Dec 10 19:32 1999 data/retrieve.html
rwxrwxrwx 1100/200  69996 Dec 10 19:32 1999 data/select_stations.gif
rwxrwxrwx 1100/200   5525 Dec 10 19:32 1999 data/tstm.gif
rwxrwxrwx 1100/200      0 Dec 10 19:31 1999 bin/
rwxr-xr-x 1100/200 201649 Dec 10 19:31 1999 bin/ASOS_smDecoder
r-xr-xr-x 1100/200   1355 Oct 29 20:02 1999 bin/ASOS_smDecoder.sh
r-xr-xr-x 1100/200 1131674 Oct 29 20:03 1999 bin/build_f6
r-xr-xr-x 1100/200    556 Oct 29 20:03 1999 bin/clean_up_am
r-xr-xr-x 1100/200    547 Oct 29 20:02 1999 bin/clean_up_im
r-xr-xr-x 1100/200    548 Oct 29 20:03 1999 bin/clean_up_pm
r-xr-xr-x 1100/200    592 Jan 15 18:55 1999 bin/climate
r-xr-xr-x 1100/200   9075 Oct 29 20:03 1999 bin/climate_am.sh
r-xr-xr-x 1100/200   8797 Oct 29 20:02 1999 bin/climate_im.sh
r-xr-xr-x 1100/200   2002 Nov 12 21:01 1998 bin/climate_man
r-xr-xr-x 1100/200   8792 Oct 29 20:03 1999 bin/climate_pm.sh
r-xr-xr-x 1100/200 4119800 Nov 18 19:09 1999 bin/create_climate
r-xr-xr-x 1100/200   1109 Oct 29 20:02 1999 bin/create_f6_product
r-xr-xr-x 1100/200   4575 Jul 22 23:36 1999 bin/display_am.sh
r-xr-xr-x 1100/200 2519060 Nov 18 19:09 1999 bin/display_climate
r-xr-xr-x 1100/200   4587 Oct 29 20:02 1999 bin/display_im.sh
```

```
r-xr-xr-x 1100/200    4576 Jul 22 23:36 1999 bin/display_pm.sh
r-xr-xr-x 1100/200 1207294 Nov 18 19:09 1999 bin/do_all_climate
r-xr-xr-x 1100/200 5906838 Nov 18 19:09 1999 bin/format_climate
r-xr-xr-x 1100/200 1610581 Nov 18 19:09 1999 bin/init_climate
r-xr-xr-x 1100/200    1090 Jan 31 20:04 1999 bin/init_climate_db
r-xr-xr-x 1100/200 1421630 Nov 18 19:09 1999 bin/qc_climate
r-xr-xr-x 1100/200    1088 Jan 31 20:04 1999 bin/qc_climate_db
r-xr-xr-x 1100/200 2599622 Nov 18 19:09 1999 bin/set_up_climate
r-xr-xr-x 1100/200    4861 Oct 29 20:03 1999 bin/set_up_climate_runs
r-xr-xr-x 1100/200    1683 Oct 29 20:03 1999 bin/set_up_climate_stations
```